

Recombinant mouse SDF-1/CXCL12 protein

Catalog Number: ATGP3159

PRODUCT INFORMATION

Expression system

E.coli

Domain

22-89aa

UniProt No.

P40224

NCBI Accession No.

NP_068350.1

Alternative Names

Stromal cell-derived factor 1 isoform alpha, Stromal cell-derived factor 1, 12-O-tetradecanoylphorbol 13-acetate repressed protein 1, TPAR1, C-X-C motif chemokine 12, Pre-B cell growth-stimulating factor, PBSF, Thymic lymphoma cell-stimulating factor, TLSF, Scyb12, Sdf1, SDF-1, Sdf1a, Sdf1b

PRODUCT SPECIFICATION

Molecular Weight

10.4 kDa (91aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Cxcl12 also known as stromal cell-derived factor 1 isoform alpha. This protein acts as a positive regulator of monocyte migration and a negative regulator of monocyte adhesion via the LYN kinase. It stimulates migration of monocytes and T-lymphocytes through its receptors, CXCR4 and ACKR3, and decreases monocyte adherence to surfaces coated with ICAM-1, a ligand for beta-2 integrins. This protein inhibits CXCR4-mediated infection by T-

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cell line-adapted HIV-1. Cxcl12 protein plays a protective role after myocardial infarction. It induces down-regulation and internalization of ACKR3 expressed in various cells. Recombinant mouse Cxcl12, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>KPVLSY RCPCRFFESH IARANVKHLK ILNTPNCALQ IVARLKNNNR
QVCIDPKLKW IQEYLEKALN K

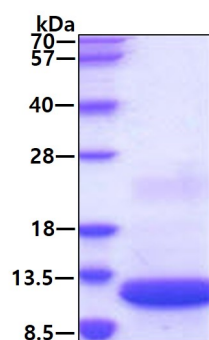
General References

Beaulande M., et al. (1998) *Nucleic Acids*. 26(2):521-4

Chen T., et al. (2015) *Am J Transplant*. 15(3):618-27

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.